

**STATE OF NEW HAMPSHIRE  
SITE EVALUATION COMMITTEE  
SEC Docket No. 98-01**

**Application of Newington Energy, L.L.C.**

**DECISION**

Newington Energy, L.L.C., filed an application for a Certificate of Site and Facility to construct and operate a 525 megawatt electric production facility in the Town of Newington, Rockingham County. Known as the Newington Power Facility, the facility will consist of two General Electric 7FA combustion turbines, two heat recovery steam generators and one steam turbine generator. A salt water mechanical draft, plume abated, cooling tower will be used to cool the plant condenser's circulating water.

The proposed facility is to be located on a 24-acre parcel located in the industrial zone of the Town of Newington. The site is on the east side of Newington approximately 1000 feet from the Piscataqua River. In addition to the site proper, the proposed facility includes a pipeline and intake structure in the Piscataqua River, and also includes a transmission line from the site proper to the substation at the PSNH Newington Power Station and a gas pipeline from the PNGTS and Maritime & Northeast (Joint Facilities) main transmission pipeline.

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## **I. INTRODUCTION**

### **Brief summary of the requirements for siting electric generation facilities in New Hampshire**

RSA 162-H was enacted in 1974 to address the need for new energy facilities caused by the oil embargos that existed during that period of time. The declaration of purpose in the statute contains the legislature's finding that "the present and predicted growth in electric power demands in the State of New Hampshire requires the development of a procedure for the selection and utilization of sites for generating facilities and the identification of a state position with respect to each proposed site." RSA 162-H:1II. An application filed with the Site Evaluation Committee is filed in lieu of separate applications normally filed with various state agencies. RSA 162-H:7 VII. The Site Evaluation Committee provides a single forum for the consideration of all issues which arise in the siting of generating facilities.

In 1996, the New Hampshire legislature enacted Chapter 374-F to restructure the electric utility industry:

The most compelling reason to restructure the electric utility industry is to reduce costs for all consumers of electricity by harnessing the power of competitive markets. The overall policy goal of restructuring is to develop a more efficient industry structure and regulatory framework that results in a more productive economy by reducing costs to customers while maintaining safe and reliable electric service with minimum adverse impacts on the environment. Increased customer choice and the development of competitive markets for wholesale and retail electricity services are key elements in a restructured industry.

RSA 374-F:1. The legislature recognized a need for a transition from a regulated market to a competitive market to achieve its goal and in RSA 374-F:1 II stated, "... Competitive markets should provide electricity suppliers with incentives to operate efficiently and cleanly, open markets for new and improved technologies, provide electricity buyers and sellers with appropriate price signals, and improve public confidence in the electric utility industry."

RSA 374-F:2 defines "Electrical suppliers" to mean suppliers of electrical generation services and includes actual electric generators and brokers, aggregators, and pools that arrange for the supply of electricity generation to meet retail customer demand. The statute declares that competitive energy suppliers, and aggregators of electricity load are not public utilities pursuant to RSA 362:2. This legislation would permit non-utility electric generation companies to gain access to the electric grid.

Consistent with its restructuring efforts the legislature amended RSA 162-H in 1998. The amendments provide that electric generating equipment and associated facilities, not subject to rate regulation by the Public Utilities Commission would no longer be considered to be "Bulk Power Facilities," rather, they are "Energy Facilities." The siting and construction of new energy facilities designed for, or capable of, operation at greater than 30 megawatts is subject to the

jurisdiction of the Site Evaluation Committee. Similarly, all transmission lines which would otherwise be considered bulk power supply facilities under RSA 162-H:2 and which are necessary to interconnect one electric generating facility or group of energy facilities to the transmission grid are now considered to be energy facilities. The adoption of the 1998 amendments to RSA 162-H and the enactment of RSA 374-F allows entities which are not public utilities to construct, operate and maintain electric generation facilities in the State of New Hampshire.

Newington Energy L.L.C. ("Applicant") filed an application with the Site Evaluation Committee to construct and operate a 525-megawatt electric production facility in the Town of Newington, Rockingham County. Newington Energy L.L.C. is not a public utility and its rates are not regulated by the Public Utilities Commission.

Known as the Newington Power Facility, the proposed facility will consist of two General Electric 7FA combustion turbines, two heat recovery steam generators and one steam turbine generator. A salt water mechanical draft, plume abated, cooling tower will be used to cool the plant condenser's circulating water.

## **II. CRITERIA FOR PROJECT APPROVAL**

Pursuant to the Declaration of Purpose set forth in RSA 162-H: 1, the public interest requires the Site Evaluation Committee ("Committee") to maintain a balance between the environment and the need for new energy facilities; to avoid undue delay in construction of any needed facilities; to ensure that operation of energy facilities is consistent with the state's least cost energy policy; and to ensure that the construction and operation of energy facilities is treated as a significant aspect of land-use planning in which all environmental, economic and technical issues are resolved in an integrated fashion.

In exercising its authority, RSA 162-H: 16 IV charges the Committee with the obligation to review Energy Facilities such as the one proposed by Newington L.L.C. In reviewing such applications the Committee must consider available alternatives, fully review the environmental impacts of the proposal, and consider all other factors relevant to the objectives of the statute. In order to issue a Certificate of Site and Facility the Committee must find that the site and facility:

- (a) Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate.
- (b) Will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies.
- (c) Will not have an unreasonable adverse effect on esthetics, historic sites, air and water quality, the natural environment and public health and safety.

- (d) Operation is consistent with the state energy policy established in RSA 378:37.

RSA 162-H:16.

The relevant inquiry under the statute, regarding environmental and other impacts, is whether the proposed facility will have an unreasonable impact on the natural environment, public health and safety, and the orderly development of the region. Whether the impacts are unreasonable depends on the assessment of the environment in which the facility will be located, an assessment of statutory or regulatory constraints, or prohibitions against certain impacts on the environment, and determination as to whether the proposed facility exceeds those constraints or violates those prohibitions. In Re: New England Electric Transmission Corp, 67 NHPUC 910, p. 923; Public Service Company of New Hampshire, SEC Report issued Dec. 15, 1992.

The Committee's certificating process subsumes separate permitting procedures under several other state statutes. Ordinarily, the Department of Environmental Services is responsible for excavating and dredging permits, air operating permits, wetlands permits, water quality certification, waste management permits, and a Section 401 water quality certificate, the Office of State Planning for a federal certificate of consistency under the Coastal Zone Management Act, the Department of Resources and Development for a natural heritage inventory permit, and the State Historical Preservation Office for a historic resources review; See Application Section C Permits. Because of the integrated process under RSA 162-H, such permits, if issued for the project, will be incorporated in the Energy Facility Certificate.

### III. SUMMARY OF CERTIFICATING PROCESS AND PUBLIC PARTICIPATION

The Legislature recognized that the selection of energy facilities has a significant impact upon the welfare of the population, the economic growth of the state and the environment of the state. The legislature established a procedure for the review, approval, monitoring and enforcement of compliance in the planning, siting, construction and operation of energy facilities. RSA 162-H:1. The Site Evaluation Committee consists of members who are Commissioners, Directors or key personnel in various state agencies. RSA 162-H:3. RSA 162-H:6 creates time frames which provide for informational hearings, public adversarial hearing and a final decision not later than nine months after acceptance of the application.

In this case the public was represented throughout the proceeding by Public Counsel appointed by the Attorney General pursuant to RSA 162-H:9. Assistant Attorney General Justin Richardson was appointed as Public Counsel in this docket. Public Counsel's obligation is to represent the public "in seeking to protect the quality of the environment and in seeking to assure an adequate supply of energy." RSA 162-H:9 I. In this case Public Counsel fully participated by submitting exhibits and witness testimony, cross examining witnesses and making recommendations and argument to the Committee. Members of the public were encouraged to attend hearings, file written comments, and present oral statements. Written comments were accepted before, during and after the public hearings until the evidentiary hearings were closed.

The Application was filed on July 2, 1998. Requests to intervene in the proceedings were received from the Town of Newington (Newington), Public Service Company of New Hampshire (PSNH), United Association of Plumbers and Pipefitters, Local 131(Local131), International Association of Bridge, Structural and Ornamental Iron Workers, Local 474, AFL-CIO (Local 474), and the Rockingham County Planning Commission. On August 13, 1998, the Committee, pursuant to its authority under RSA 541-A: 33 II, granted general appearances and full intervenor status to the Town of Newington and PSNH. Local 131 and Local 474 were granted limited appearances and limited intervenor status on August 13, 1998.<sup>1</sup> On August 26, 1998, the Committee granted a limited appearance and limited intervenor status to the Rockingham County Planning Commission. T. 8/26/98, p. 4.<sup>2</sup> The written Order allowing limited intervention was issued on August 27, 1998.

The Committee held a public meeting on August 26, 1998. At that meeting the Committee determined that the Application contained sufficient information to satisfy the Committee's requirements and the requirements of each state agency with jurisdiction. See, RSA 162-H:7. T. 8/26/98 p. 49. In accordance with the vote of the Committee a written Order on Acceptance of Application was issued on August 28, 1998. The Order accepted the Application as complete with respect to the footprint of the plan but advised the Applicant and the public that the granting of a Certificate of Site and Facility may be conditioned upon or withheld "until such time as gas and electrical infrastructure requirements are more clearly known and evaluated."

On September 17, 1998, the Committee held an Informational Hearing, pursuant to RSA 162-H:10 I, at the Town Hall in the Town of Newington, Rockingham County. Notice of the Informational Hearing was published in The Union Leader (published at Manchester, Hillsborough County), and The Portsmouth Herald (published at Portsmouth, Rockingham County) on August 29, 1999 and in the Foster's Daily Democrat (published at Dover, Strafford County) on September 1, 1998.<sup>3</sup> Immediately preceding the Informational Hearing the

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<sup>1</sup> RSA 541-A: 33 (III), the New Hampshire Administrative Procedure Act, permits an agency to limit the scope of participation by an intervenor. The limited appearances granted by the Committee are defined in the Committee's Draft Rules at Site 203.04. Limited intervenors are permitted to "state their position either orally or in writing" prior to the formal close of the record. However, a limited intervenor does not become a party to the proceedings. Site 203.04(b) (Draft). A general appearance allows an intervenor to become a party to the proceedings. Site 203.04(a) (Draft). Although the Committee's Draft Rules are not formally promulgated all intervenors were advised by Order of the Committee to acquaint themselves with the Committee's Draft Rules and RSA 162-H.

<sup>2</sup> References to transcripts of proceedings will be referenced as "T." followed by the date of the hearing and the page number. Reference to the Application of Newington Energy, LLC will be referenced as "Application" followed by the page or section reference as appropriate. References to Exhibits admitted during the proceedings will be referred to as "Exhibit" followed by the appropriate numerical or alphabetical designation. References to pre-filed testimony will be referred to as "PT" followed by the name of the witness and page designation. References to responses to record requests will be referred to as "RR" followed by the party, date and page or appendix designation.

<sup>3</sup> Each of the newspapers which published notice of the Informational Hearing has regular circulation in Rockingham County.

Committee performed an on-site inspection of the proposed site. At the Informational Hearing the Applicant presented information regarding the Application and the proposed site. Pursuant to RSA 162-H: 10, the Committee and members of the public obtained information by submitting questions to the Applicant's representatives.

On September 17, 1998, the Committee also issued a procedural schedule which allowed ample time for the parties to conduct discovery but also permitted the Committee to complete its proceedings and issue a final Order within the nine month time frame required under RSA 162-H:6 VII.

By letters dated October 9, 1998 and October 22, 1988, Local 131 requested a change in its status from limited intervenor to a general intervenor with a general appearance. On October 22, 1998, by written Order, the Committee granted the request of Local 131 and permitted it to file a general appearance as a party to the proceedings.

On January 13, 1999, some six months after the acceptance of the Application and one month prior to the scheduled commencement of adversarial hearings, Local 474 moved to change its status from limited intervenor to a general appearance. The Applicant objected to the motion on January 22, 1999. By order dated February 1, 1999, the Committee, finding that Local 474 failed to demonstrate any substantial interest affected by the proceedings, and that the grant of a general appearance at such a late date would impede the orderly and prompt conduct of the proceeding, denied the motion. Local 474 subsequently filed a motion for rehearing, which was denied by the Committee on February 16, 1999. T. 2/16/99 p. 39.

On February 10, 1999, Local 131, withdrew its appearance because its environmental and public safety concerns had been addressed through the discovery process. Local 131 indicated that since its concerns had been addressed further participation would not contribute toward its concerns. See, Letter dated February 10, 1999, from James Bianco, Esq. to the Committee.

A public adversarial hearing was held before the Committee on February 16 and February 17, 1999. Public notice of the hearing was published in the Portsmouth Herald on January 14, 1999 and in The Union Leader and Fosters Daily Democrat on January 15, 1999. At the public adversarial hearing the Applicant, Public Counsel, and Newington presented witness testimony and exhibits. All parties participated in the cross examination of witnesses and oral argument. At the conclusion of the adversarial hearing the Committee ordered that the record of the proceeding would remain open until March 15, 1999, so that the parties could file responses to record requests made during the course of the proceedings. The Chairman invited members of the public and limited intervenors to submit questions that the Committee would pose to the Applicant or other witnesses. No person submitted any such questions. Counsel for limited intervenor Local 474 submitted comments after the hearing in the form of a letter dated March 10, 1999, in which Local 474 proposed certain conditions to be required of the Applicant.

On March 16, 1999, the limited intervenor, Local 474, filed a motion to temporarily suspend deliberations pending an appeal to the New Hampshire Supreme Court. The motion was denied by Order dated April 7, 1999. On May 18, 1999, Local 474, by letters, withdrew its limited

appearance in the matter and its appeal to the NH Supreme Court.

On April 19, 1999, the Committee issued an additional set of record requests concerning the financial, technical and managerial capabilities of the Applicant in light of a change in the ownership interest of the Applicant. The Applicant responded to the additional record requests on April 29, 1999. Although permitted to do so, the other parties did not respond to the additional record requests or offer any comment.

#### **IV. POSITION OF THE PARTIES**

##### **Applicant:**

The Applicant applied for a Certificate of Site and Facility for the construction and operation of a 525 megawatt (MW) combined cycle natural gas generating facility with associated electric transmission and gas pipeline facilities in the Town of Newington. The facility is proposed to burn low sulfur distillate as a backup fuel whenever natural gas is either not available or is prohibitively expensive. The facility will operate as a merchant power facility and will generate low cost power to supply to the New England Regional transmission grid. The Applicant advises that the 525 MW power facility will utilize the latest state of the art natural gas fired technology. The facility will have extremely high operational efficiency and low air emissions. The Applicant maintains that its facility is consistent with the objectives of electric industry restructuring in that it will provide reliable and cost competitive electricity to wholesale purchasers in New England, which will benefit the residents of New Hampshire.

Application, Vol. III Section F-7. The Applicant submits that the facility will not unduly interfere with the orderly development of the region, will not have an unreasonable adverse effect on the environment and public health and safety, and that its operation is consistent with the state energy policy. The facility will fully comply with the applicable environmental standards and other guidelines of the New Hampshire Department of Environmental Services and other reviewing agencies. Based upon the foregoing representations the Applicant submits that the proposed project meets the criteria for the issuance of a Certificate of Site and Facility.

In support of its position the Applicant presented the testimony of Norman E. Cowden, former Project Manager for the Applicant; Ronald H. Bozgo, vice president for engineering at Consolidated Edison Development Corporation; and a panel of engineers from TRC Environmental Corporation.

On the first day of the adversarial hearing, February 16, 1998, the Applicant informed the Committee of a change in its ownership. The Applicant reported that one hundred percent of the ownership interest in Newington Energy, LLC had been transferred from SEI New England Inc. (an indirect subsidiary of Southern Company) and SEI New England Holdings Corp. (an indirect subsidiary of Southern Company) to CED/SCS Newington, LLC. T. 2/16/99 p. 68. As a result of the change in ownership of the Applicant on the eve of the adversarial hearing the Committee issued a final record request on April 19, 1999. The Applicant replied to that request on April 29, 1999.



**Public Counsel:**

Public Counsel participated fully at every stage of the proceeding. He took an active role in the proceedings through the presentation of witnesses and exhibits and vigorous cross examination of witnesses sponsored by other parties. Public Counsel raised specific concerns regarding the noise impact of the proposed facility and its impact on local fire and safety issues. In addressing these concerns Public Counsel sponsored the testimony of James Barnes of Acentech, a multi-disciplinary acoustical consulting firm and Henry Renfrew, a safety consultant who analyzed the fire and safety issues relative to the construction and operation of the proposed facility. Through Mr. Renfrew and Mr. Barnes Public Counsel proposed and recommended that the Committee adopt specific conditions concerning the noise and safety impacts of the proposed facility. Those conditions, which were generally unopposed by the other parties, are addressed below.

**Town of Newington:**

The Town of Newington intervened in the proceedings. The Town supports the granting of a Certificate of Site and Facility, but addressed concerns about the impacts the proposed power plant would have on the development of the industrial area of the town, including traffic problems caused by the proposed truck staging area; safety issues regarding the amount of propane stored in a small area; impacts on the town sewer system; the routing of the electric transmission connection; the creation of the industrial road; and various safety issues regarding gas leakage detection systems and Fire Hazard Risk Assessment Plans, as well general impacts on the residents of the Town.

In addressing its concerns, Newington presented the testimony of the Town Fire Chief, Larry Wahl and Dennis Hebert, a member of the Town Planning Board.

**Public Service Company of New Hampshire:**

PSNH participated in the proceedings under a general appearance. Although PSNH cross examined witnesses and presented its position on various issues through its counsel, PSNH did not present any testimony at the adversarial hearings.

**Local 131:**

Prior to the adversarial hearing Local 131 raised issues concerning impacts on air quality and water quality. After extensive discovery and negotiations Local 131 was satisfied that its concerns were responded to and incorporated in the conditions recommended by the Department of Environmental Services, Air Resources Division and Water Division and withdrew its appearance. See Letter of James Bianco, Esq. dated February 10, 1999.

**Local 474:**

By letter dated March 10, 1999, limited intervenor Local 474 proposed that the Applicant be required to meet three proposed conditions, intended to address Local 474's

concerns that economic development, quality construction, workforce training needs, employee retirement income security, employee medical care security, and fair competition between employers will be adversely affected by the Applicant's intended use of "low bid" construction contracts .

## **V. ANALYSIS AND FINDINGS**

This project is the first application that comes before the Site Evaluation Committee as a direct consequence of changes in the electric production and generation industry resulting from legislative action providing for competition in the generation of electricity in the State of New Hampshire through market facilities. These market facilities are not utility companies and are not subject to price regulation by the Public Utilities Commission. Consideration of these projects involve detailed analysis of the site-specific impacts as well as thorough consideration of the overarching questions of public safety, the natural environment, and orderly development. RSA 162-H:16. The Committee has fully considered all of the issues raised by the Application and the evidence. In this Order the Committee will discuss, in detail, only those issues which require expanded analysis. For uncontested and less complex matters, the Committee will adopt by reference filings and conditions suggested or agreed to by the various parties. Pursuant to RSA 162-H:16 I, the Certificate of Site and Facility will incorporate, without significant discussion, the certificate conditions recommended by the individual agencies that would, in the absence of RSA 162-H, have had jurisdiction over various portions of the application.

### **A. Requirements for an Energy Certificate**

At the outset the Site Evaluation Committee must determine whether the facility proposed by the Application requires a Certificate of Site and Facility.

RSA 162-H:2 VII defines "energy facility" as follows:

"Energy facility" means any industrial structure, other than bulk power supply facilities, as defined in paragraph II, that may be used substantially to extract, produce, manufacture, transport or refine sources of energy, including ancillary facilities as may be used or useful in transporting, storing or otherwise providing for the raw materials or products of any such industrial structure. This shall include but not be limited to industrial structures such as oil refineries, gas plants, equipment and associated facilities designed to use any, or a combination of, natural gas, propane gas and liquified natural gas, which store on a site a quantity to provide 7 days of continuous operation at a rate equivalent to the energy requirements of a 30 megawatt electric generation station and its associated facilities, plants for coal conversion and onshore and offshore loading and unloading facilities for energy sources. Energy facility shall also include energy transmission pipelines, storage tanks, or any other facility which the Applicant or 2 or more petition categories as defined in RSA 162-H:2 XI request and the Committee agrees, or which the Committee determines requires a certificate, consistent with the findings and purposes set forth in RSA 162-H:1. Energy

facility shall include electric generating station equipment and associated facilities only if they are designed for, or capable of, operation at a capacity of greater than 30 megawatts.”

The proposed facility is a 525 MW natural gas fired combined cycle co-generation plant and is to be located on a 24 acre parcel located in the industrial zone of the Town of Newington. The plant and its associated facilities are designed to produce, manufacture and transport electrical energy. In doing so the plant will use natural gas as its main fuel. The proposed site is on the east side of Newington approximately 1000 feet from the Piscataqua River. It is in close proximity to an existing power plant, two proposed power plants, a major river and a heavy industrial area. The impact of the proposed facility on the region can be significant. The impact must be examined to determine the effect on environmental and other conditions that will be caused by this project. In addition to the site proper, the proposed facility includes a pipeline and intake structure in the Piscataqua River, and also includes a transmission line from the site proper to the substation at PSNH's Newington Station and a gas pipeline from PNGTS and Maritime & Northeast (Joint Facilities) main transmission pipeline.

The Committee finds that the proposed facility's size, 525 MW, brings this application within the requirements of 162-H requiring a Certificate of Site and Facility.

## **B. Available Alternatives**

RSA162-H:16 IV imposes on the Committee the obligation to consider available alternatives in addition to a full review of the environmental impact of the site, and other relevant factors bearing on whether the objectives of the statute would best be served by the issuance of the certificate.

The Applicant reviewed three alternative sites. Application Vol. III Sec. F1 p. F-4. The sites were identified as the Gosling Road site, the Simplex site, and the Mareld site. The possibility of siting the proposed facility on the former Pease Air Force base was also examined and considered by the Applicant. The Applicant's basic criteria for selection of a site were the availability of a sufficiently large industrially zoned tract of land, access to the high voltage transmission grid, access to sufficiently large supplies of natural gas, access to a large supply of cooling water, favorable local property taxes, and a favorable community attitude to business development. Of the available sites reviewed, Newington was found by the Applicant to most closely match the basic criteria used in the selection process. For a more detailed description of the selection process see, Application Vol. III Sec. F1.

The proposed site, the Mareld site, was chosen because the natural gas pipeline lateral will run across the site; river access can be secured with an easement from only one company; the proposed transmission line is accessible to nearby PSNH facilities; the location of the River near the site where the intake and discharge will be located has no thermal plumes to interfere with the mixing zone; and the property is industrially zoned. See, PT Norman E. Cobden, Exhibit 22, p. 9.

The Applicant also reviewed three alternative routes for the location of the transmission line. The alternatives were identified as Woodbury Avenue, the proposed Industrial Road and the Railroad corridor. See, PT Norman E. Cobden, Exhibit 22, pp 12-14. The Application identifies the Railroad as its preferred route. However, after discovery and negotiations, the Applicant and the Town of Newington agreed to submit the proposed industrial road as the best route to provide for the orderly development of the area.

The Committee has considered the alternative sites and is satisfied that the Mareld site, as set forth in Section F of Volume III of the Application, with the conditions attached hereto, is an appropriate site for the proposed plant and associated facilities.

### **C. Statutory Criteria**

#### **1. Applicant's Capability**

The first statutory factor the Committee must consider is whether the Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate. RSA 162-H: 16, IV(a).

Newington Energy L.L.C., at the time the application was filed, was an indirect subsidiary of the Southern Company. Through Southern Energy and its subsidiaries such as SEI New England, the Southern Company develops, builds, owns and operates power production and delivery systems across the United States and internationally. The Southern Company has operating revenues of \$12.6 billion in 1997. Consolidated net income for the company was \$0.972 billion. Corporate assets at the end of 1997 totaled \$35.3 billion.

On February 16, 1999 the Applicant informed the Committee that on February 14, 1999, the Southern Company and its subsidiary entered into an agreement to convey all of its interest in the proposed project to CED/SCS Newington, L.L.C. Newington Energy L.L.C. will be owned 100% by CED/SCS Newington, L.L.C. ("CED/SCS"), a limited liability company formed in the State of Delaware. CED/SCS is owned approximately 95% by Consolidated Edison Development, Inc., a New York corporation, and 5% by SCS Energy, L.L.C., ("SCS") a limited liability company organized in the State of Delaware. Consolidated Edison Development, Inc. (CED) is the energy project development and acquisition subsidiary of Consolidated Edison, Inc., which is the holding company for one of the largest investor-owned utilities in the United States. SCS develops, finances and owns independent power and merchant power plant projects in northeastern United States and Latin America. SCS is managed by its three members, Frank W. Smith, James L. Croyle and Joseph C. Swift, all of whom have extensive experience in the energy industry. See, Application, Replacement Section A, Applicant Information, p. A-1 through A-3 and Attachment A-1 and Attachment A-2 and Replacement Section F.2, pages F-6 and F-7.

CED/SCS represents that it will honor and implement the commitments made by the previous owners of Newington Energy, L.L.C. See, PT Ronald H. Bozgo, Exhibit 5; T. 2/16/99 p. 157.

The transfer of project ownership occurred, literally, on the eve of the adversarial hearing process. Understanding the complexities involved in such a transfer and the possibility that the parties might wish to supplement the record on this issue the Committee issued additional record requests. The requests addressed the financial, technical and managerial capabilities of the Applicant under its new ownership and the role that its indirect parent company, Consolidated Edison Development Inc., would have in the financial, technical and managerial aspects of the proposed facility. The Applicant responded to the requests on April 29, 1999. On May 10, 1999, the Town of Newington filed a letter with the Committee supporting the new ownership of the Applicant.

The Applicant itself is a limited liability company created in and formed under the laws of the State of Delaware on June 1, 1998. PT Norman E. Cobden, Exhibit 22 p. 3. The Applicant is now owned by CED/SCS which is also a Delaware limited liability company. CED/SCS is governed by the terms of a limited liability company agreement. Pursuant to that agreement CED/SCS is governed by a management committee which initially consists of three members, two of whom are appointed by CED. The remaining member is appointed by SCS. The management committee may eventually consist of five members, four of whom are appointed by CED. RR Applicant, 4/29/99, p. 8. Management decisions are made by a simple majority of the members of the management committee. RR Applicant, 4/29/99, p. 8. Under this management structure it is clear that CED maintains the ability to control management decisions effecting the Applicant.

The Applicant, under its present ownership, has been funded, to date, by CED. Through April 29, 1999, CED has funded the Applicant by injecting approximately \$ 3.2 million to fund development costs associated with the Application and development of the project. RR Applicant, 4/29/99, p. 2; RR Applicant, 4/29/99, app. 5. The Applicant estimates that its short term development costs before financing will be approximately \$10 million. RR Applicant, 4/29/99, p. 3. The Applicant seeks to finance \$ 185 million of the proposed project and estimates that additional equity of \$ 120 million will be necessary to complete construction. RR Applicant, 4/29/99, p. 3. CED has made a considerable investment in the project to date and based upon its representations appears to be ready to continue to make substantial contributions to and investments in the Applicant and its proposed facility.

The Applicant through CED suggests that as a member of the Con Edison family of companies it has strong relationships throughout the banking and finance community. RR Applicant 4/29/99, p. 10. In support of this suggestion CED advises this Committee that it has obtained \$ 133.8 million in project financing for other projects in the United States, Central America and Europe. RR Applicant, 4/29/99, p. 10. According to the Applicant there are presently at least sixteen merchant power facilities in the United States that have obtained total financing in excess of \$ 3 billion. The Applicant also advised the Committee that, if for some reason financing is unavailable, it is possible that CED would finance the project from its own assets. RR Applicant, 4/29/99, p. 10.

The ownership relationship between the Applicant and CED as well as the significant investment of CED to date support the finding that the Applicant is financially capable of constructing and

operating the proposed facility.

During the course of the adversarial hearing the Applicant indicated that both construction and operation of the proposed facility may be contracted to third parties. In response to record requests the Applicant demonstrated that it had already undertaken the drafting of an extensive Engineering Procurement and Construction (EPC) contract and extensive Project Specifications with the assistance of Burns and Roe, an experienced power plant engineering and design firm. RR Applicant, 4/29/99, p. 4-5. The Applicant also identified the criteria which it will use in selecting construction and equipment contractors and has contacted a number of the leading power plant construction and equipment firms in the nation. RR Applicant, 4/29/99, p. 4-5. The Applicant also asserts that its affiliation with CED and, indirectly, with Consolidated Edison Company of NY (CECONY) provides a wealth of experience in the development, construction and management of the proposed facility. Id.

Similarly, the Applicant relies upon its relationship with CED and the ConEd Family of companies to demonstrate its ability to manage the operation and maintenance of the proposed facility. ConEd companies presently operate over 8000 MW of nuclear, gas and oil fired plants. CED itself operates several smaller generation facilities. RR Applicant, 4/29/99, p. 6. The Applicant indicates that, amongst other criteria, "experience in operating excellence including a history of plants that are kept in well maintained and efficient condition" is one criteria that it will use in selecting a contractor to operate and maintain the proposed facility. RR Applicant, 4/29/99, p. 7.

Based on the information submitted, the Committee concludes that the Applicant Newington Energy, L.L.C. as an affiliate of CED, a member of the ConEd family of companies has sufficient financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate.

Of course, this finding is based in large part upon the relationship between the Applicant, CED and the ConEd organization. CED has provided all capital, to date, for the Applicant and significantly relies on its affiliation with CECONY and the other ConEd companies to establish its financial, technical and managerial capabilities. Any change in the ownership interest of the Applicant, Newington Energy, LLC, may significantly affect the findings of this Committee and its obligation to monitor the construction and operation of energy facilities. RSA 162-H: 4 I (c). The Certificate of Site and Facility will be granted to the entity, Newington Energy, LLC, as it is presently owned and exists. Any change in ownership of Newington, LLC, without the approval of this Committee, shall render the Certificate subject to revocation. The Certificate itself shall not be transferred or assigned to any other person or entity without the approval of the Committee. RSA 162-H:5 I.

In its letter dated March 10, 1999, counsel for limited intervenor Local 474 proposed certain conditions to require the Applicant to use construction workers who have received certified apprenticeship training, and who are covered by retirement and medical insurance. In addition to citing economic development concerns, Local 474 argues that such conditions are needed to counter the risk that a "low-bid" approach to construction

will necessarily produce poor quality construction, with attendant environmental and safety consequences. We discuss these proposed conditions here, under Applicant's qualifications, because they do not all fit squarely into the categories of issues we must consider under the statute.

To the extent Local 474's concerns are with workforce development, economic fairness, and general economic development in New Hampshire, these issues are beyond the scope of an appropriate review under the siting statute. To the extent the proposed workforce conditions are intended to assure safe construction, we note that health and safety conditions required in this Order, as discussed below, will address many of the concerns raised by Local 474. And consistent with our findings of managerial, technical and financial qualification, we expect that the Applicant, which is associated with a utility with a long track record of power plant construction, will pursue quality construction, and the health and safety of the construction workforce. See, RR of April 29, with construction criteria and draft construction contract.

## **2. Orderly Development**

RSA 162-H: 16, IV (b) requires the Committee to consider whether the proposed project will "unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies."

The Town of Newington through its Board of Selectmen, its Planning Board and its attorneys support the grant of a Certificate of Site and Facility to the Applicant subject to certain conditions that are addressed later in this Order. Newington indicates that the proposed facility is consistent with the orderly development of the area and is consistent with the Town's Master Plan, Exhibit, Newington 2, and its Zoning Ordinance, Exhibit, Newington 3.

As part of the proposed generation facility, the Applicant plans associated facilities including an electric transmission line and a gas pipeline. The Applicant plans to build an overhead radial interconnecting electric transmission line. The line will interconnect the proposed Newington Power Facility to the 345 kV regional substation located adjacent to the PSNH Newington Station approximately 1.25 miles from the facility site proper. In the application, the Applicant originally proposed the line to travel from the B & M rail road property and enter PSNH property where it will connect to the 345 kV substation. The Town of Newington, through its witness, Planning Board member, Dennis Hebert, recommended the transmission line leave the substation on the project site then follow a proposed industrial service road. The Town submitted that placing the line along the proposed industrial service road creates an industrial corridor where all local industry infrastructure can be placed. Mr. Hebert, on behalf of the Town, further recommended that the transmission line be designed and built with the capacity to hold an additional line.

T. 2/17/99, p. 25 - 34.

The Applicant does not object to the Town's recommendation and has proposed using the

industrial corridor for the transmission line. However, the Applicant is concerned that it may not be able to obtain the necessary easements for the required right of way. It must be recognized that the proposed plant, a market power facility, is not a public utility and, therefore, the Applicant does not possess powers of eminent domain or condemnation. See generally, RSA 371. As a result, the Applicant requests the Committee to approve the route along the industrial road along with an alternative route along the railroad property if the preferred route easements cannot be obtained.

After the adversarial hearing the Applicant and the Town submitted a stipulation setting forth conditions governing the site selection for the transmission line.

The Rockingham County Planning Commission participated throughout the proceedings as a limited intervenor and received copies of all filings. The Committee did not receive any objections or comments regarding the site itself or the electric transmission line route from the Rockingham County Regional Planning Commission. The Committee finds the proposed project and associated facilities, with the conditions imposed by the Committee, is consistent with the orderly development of the region and does not impose any unreasonable impact to the orderly development of the area. In fact, the development of the proposed facility on the proposed site is consistent with the Town's Zoning Ordinance and its Master Plan. See Exhibit, Newington 2, 3. However the Committee will address the electric transmission line route issue in more detail.

The Committee has reviewed and examined the industrial road route and the railroad route and finds that both routes are acceptable to accommodate the electric connection for the proposed power plant to the electrical grid and both are consistent with the orderly development of the region. However, the Committee finds the industrial road is the more preferable route as it alleviates congestion along the river and provides for future water front development. Recognizing there is a possibility that the Applicant will not be able to obtain the necessary easements, the Committee will adopt a condition which will provide for an alternate route to be available for the power plant's associated facilities. However, to insure that the Committee can determine that the Applicant has adequately pursued the right of way for the proposed industrial corridor route the Committee's conditions differ slightly from the conditions proposed by the parties.

The conditions proposed by the parties require that the Applicant use its "due diligence" and "best efforts," short of instituting legal proceedings, to acquire rights to a right of way along the proposed industrial corridor ("Option 1") on "commercially reasonable terms" and within three months of the issuance of a Certificate of Site and facility. RR 3/15/99, Joint Condition . The proposed conditions permit the Applicant to file a request with this Committee to proceed with "Option 2" (the railroad route) if it is unable to acquire the right of way along the proposed industrial corridor. If a party does not object within 20 days of the request the Applicant may proceed to develop Option 2, the railroad route. RR 3/15/99. The parties also agree that this Committee shall retain jurisdiction over the Applicant's request to proceed with Option 2.

In order to insure that meaningful information is made available to this Committee in the event that the Applicant is unable to secure a right of way over the proposed industrial corridor -



Option 1, the Committee adopts the conditions stipulated to by the Applicant and Newington. However, in the event that a request to proceed with the railroad route - Option 2 - is filed, that request must include the following:

1. A written record of all negotiations with landowners along the route designated as Option 1. This record must be sufficient to establish that the Applicant has used due diligence and its best efforts, short of instituting legal proceedings, to obtain the required right of way.
2. Copies of all offers, counteroffers and other correspondence concerning the efforts of the Applicant to secure the required right of way.
3. A detailed explanation of how the Applicant determined and decided that the right of way could not be secured on commercially reasonable terms including the definition of "commercially reasonable" used by the Applicant.

Additionally, the Applicant shall not proceed with the development of the railroad route until such time as this Committee has approved the request. The Committee will respond to the request within 60 days of receipt of all materials and information set forth above.

The application also proposes a natural gas pipeline from a proposed tap on the PNGTS and Maritime & Northeast Pipeline main transmission line to the Newington Power facility which the Committee finds does not adversely affect the orderly development of the region.

### **3. No Unreasonable Adverse Effect**

In order to issue a Certificate, RSA 162-H: 16 IV ( c ) requires the Committee to find that the site and facility will not have an unreasonable adverse effect on 1) aesthetics, 2) historic sites, 3) air and water quality, 4) the natural environment, and 5) public health and safety.

It must be noted at the outset of this discussion that there are few, if any human endeavors, which can be undertaken without some impact to the environment. Recognizing this, the Legislature sensibly charged the committee to "maintain a balance between the environment and the possible need for new energy facilities in New Hampshire." RSA 162-H:1. The statute requires this inquiry to determine whether the impact is "unreasonably adverse." This phraseology assumes there will be an impact, and calls for an assessment of the impact. State and federal statutes and regulations provide the framework for this assessment. They establish constraints or prohibitions against certain environmental impacts. If the proposed project complies with those constraints or prohibitions, it is reasonable to assume that the impacts created can be considered reasonable.  
Re: Tennessee Gas Pipeline. SEC 89-01 p. 8.

Each of the five categories set forth in RSA 162-H: 16 IV ( c ) are discussed as follows:

#### **a. Impact on Aesthetics**

The construction of the proposed project will be in an existing industrial area and in a heavily developed area bounded by the Spaulding Turnpike and the Piscataqua River adjacent to a number of other industrial facilities. The area is located in an industrial zoned area and per the Town of Newington's Zoning Ordinance, Town of Newington Exhibit 3 and Master Plan, Town of Newington Exhibit 2, is in compliance with the Town's objectives for industrial development.

In addressing the potential visual impacts of the proposed facility, the Applicant submitted a field program designed to evaluate the visibility of the facility components. Application, Vol III F-19. The program utilized a computer graphic software program which superimposed viewshed photographs from different locations and showed that the aesthetic impacts of the plant were minimal from all locations. The views incorporated the main turbine building having a height of 105 feet; the exhaust gas stack standing at a height of 150 feet; the twelve cells comprising the cooling tower having a height of 60 feet; a water storage tank and two fuel oil storage tanks with heights of 48 and 36 feet respectively. The visual impact of the electric transmission interconnection was also considered. Although the transmission line structures will be somewhat taller than the existing 115 kV transmission structures, the use and view will be comparable.

In addition to the evidence presented by the Applicant, the Committee visited and inspected the site on September 17, 1998.

No competing evidence was offered by any party concerning the impact of the project on aesthetics.

The Committee finds the presence of the proposed energy facilities conforms to the visual and aesthetic characteristics of the area and does not impose any unreasonable impact to aesthetics.

#### **b. Impact On Historic Sites**

The Applicant presented an evaluation of the cultural and historic resources found on or near the facility site. Application, Vol. III F-17; Exhibit 22, p. 10 - 12. Information was collected from the New Hampshire Historical Society library, and the New Hampshire State Historic Preservation Office was contacted. The evaluation confirmed that no known archeological or historic resources are situated on the site. To further assure that there are no historic or cultural resources on the site the Applicant proposes that a Phase I archeological investigation be performed on a three acre undisturbed forested section of the site prior to any groundbreaking. Application, Vol. III F-18; Exhibit 22 p. 12. In the event that any archeological artifact, questionable artifact or unidentified burial is uncovered or discovered during construction the Applicant shall immediately report same to the appropriate state or federal agency. No evidence was submitted suggesting that the facility, as proposed, will have any impact on cultural or historical artifacts or sites.

With the safeguard of the aforementioned Phase I archeological investigation, the committee finds the proposed facility will have no unreasonable impact on historic sites in the area.

### **c. Impacts On Air And Water Quality:**

#### **i) Air Quality**

The Applicant's witnesses suggest that the facility will have insignificant impacts on the ambient air quality, as defined by the United States Environmental Protection Agency ("EPA"), and as a new major stationary source, will have to comply with numerous state and federal regulations. These include the prevention of significant determination ("PSD") regulations, non-attainment new source review for emissions of nitrogen oxides ("NOx") and volatile organic compounds ("VOCs"), and the National Ambient Air Quality Standards ("NAAQS") for criteria pollutants. These regulatory programs require that the facility apply the lowest achievable emission rate ("LAER") for non-attainment pollutants such as NOx and the best available control technology ("BACT") for carbon monoxide, particulate matter, and sulfur dioxide. In addition to the foregoing regulatory programs the Applicant must also demonstrate that the proposed facility will not cause or contribute to a violation of the PSD Class II increments or the New Hampshire Ambient Air Limits ("AALs") for toxic air pollutants and will not have a negative impact on local visibility; damage local vegetation; or degrade visibility in Class I areas.

To achieve these regulatory limitations, the Applicant submits that the proposed facility will use high technology control strategies for air pollution. These strategies include the use of advanced combustion technology to reduce carbon monoxide emissions. The project will also use natural gas and very low sulfur number 2 distillate fuel oil as primary and back up fuels for the combustion turbines, respectively. The use of this combustion technology and fuel sources will limit the emissions of sulfur dioxide and particulate matter.

To assure that the facility meets the LAER limits for NOx, the Applicant proposes to use two General Electric 7FA combustion turbines and install a SCR system. In addition, oil firing will be limited to 29.2 million gallons per year, which is equivalent to 30 days per year of fuel oil usage. The facility also proposes to install a conservation vent on the fuel oil storage tank to reduce evaporated VOC emissions.

In addition to these emissions controls, the facility will obtain emission offsets from existing sources equal to 1.2 times its proposed allowable emissions of NOx. These emission offset credits will be obtained pursuant to state and federal regulations.

The Applicant, after conducting extensive study and modeling, concludes that the facility will not cause or contribute to violations of the NAAQS for any criteria pollutant; that the facility will meet LAER and BACT control technology requirements; that the facility will not have an adverse impact on visibility in any Class I areas; the facility will not have an adverse impact on local vegetation; and that the facility will not cause adverse impacts to visibility; and, that the facility will comply with all other applicable state and federal air quality requirements. The Applicant suggests that the facility will be a model for using high-technology and careful site design to minimize impacts to air quality, and will have no adverse effects on the air quality of the State of New Hampshire. The use of natural gas reduces emissions of air pollutants and provides the opportunity to lower energy costs and economically meet strict, new environmental

requirements. The Applicant has prepared illustrations and air quality studies on how natural gas can provide direct air quality benefits to the northeast, which are set forth in its Application, Section C, Appendix B.

The New Hampshire Department of Environmental Services, Air Resources Division (“DES”) has examined the impacts on air quality and has issued a Final Determination and Temporary Permit. Exhibit #67; see, Attachment G. All of the parties acknowledge that the Air Resources Division’s examination and study of the Applicants plans is detailed and addresses all of the significant impacts required by the state and federal requirements. The Final Permit, Section III, includes General Operating Limitations and Conditions which the Committee adopts and incorporates as part of the Certificate of Site and Facility. The Conditions included in the Final Permit provide for the necessary action to prevent or mitigate air quality impacts and keep the operation of the proposed facility within the current state and federal air quality standards.

DES also anticipates that the construction and operation of the Newington Energy facility may result in a direct benefit to regional air quality. This benefit would be realized if the facility commences operation and displaces other facilities currently operating in the region. The current fleet of power generating facilities in the region include oil-fired, coal-fired, nuclear fueled and some limited hydro. The coal and oil units in the region emit air pollutants at a rate significantly higher than Newington Energy. The table below compares the regional average emission rates for fossil fuel (coal and oil) facilities in the region to Newington Energy:

Pollutant	Average Fossil Plant <sup>4</sup>	Newington on Gas	Newington on Oil
NOx	4.4 lb/MW-hr	0.03 lb/MW-hr	0.14 lb/MW-hr
SO2	8.3 lb/MW-hr	0.012 lb/MW-hr	0.18 lb/MW-hr
CO2	2339 lb/MW-hr	1070 lb/MW-hr	1500 lb/MW-hr

The table above clearly demonstrates that the Newington Energy facility will emit pollutants at a rate significantly below the average fossil fuel plant in the region. If each MW of power produced by Newington Energy were to displace a MW of power currently being produced by an average fossil plant in the region, the net emission reductions of NOx, SO2 and CO2 in the region would be as follows:

Pollutant	Annual Emissions from Newington <sup>5</sup>	Annual Emissions From Average Fossil Plant	Net Reduction of Pollutants
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<sup>4</sup> Source: NESCAUM GPS Workgroup.

<sup>5</sup> All emissions estimates are based on Newington Energy producing 4,599,000 MW-hr on an annual basis.

NOx	205 TPY	10,118 TPY	9,912 TPY
SO2	125 TPY	19,086 TPY	18,961 TPY
CO2	2,460,465 TPY	5,378,531 TPY	2,918,066 TPY

The construction and operation of facilities like Newington Energy could produce significant regional benefits if older, dirtier plants are displaced. These benefits would likely lead to regional reductions in air pollution which would help protect public health, improve environmental quality and reduce regional haze.

The Committee finds that the proposed facility constructed and operated, as conditioned by the DES, will not impose any unreasonable adverse impact to air quality. Said conditions will be attached to the Certificate of Site and Facility, as Attachment G.

## ii) Water Quality

Through the pre-filed testimony of David Schafer, Exhibit 22 pages 18-22 and the testimony of its engineering panel, T. 2/16/99 p. 199 - 239, the Applicant submits that the construction and operation of the facility will have minimal adverse effects of water quality. Three major areas of concern were identified. These areas include the cooling water demands for the facility, impacts resulting from thermal discharge from the facility, and impacts resulting from the discharge of cooling tower blowdown.

The cooling water demands for the facility will be satisfied through construction of a new intake in the river. The remainder of the facility's water requirements, including potable water, will be satisfied through an interconnect with the City of Portsmouth's municipal distribution system.

The Applicant submits that the volume of water intake represents the principal controlling mechanism governing potential ecological impacts associated with the entrainment and impingement of aquatic life. As a result, several operational characteristics of the facility have been directed at minimizing to the greatest extent practicable, the cooling water requirements of the facility. Exhibit 22, p 19.

First, the Applicant proposes to use combined cycle technology. Only one-third of the electric output from the facility will rely on the steam cycle. The remaining two-thirds of the electric output will be generated by the combustion turbines. Since less excess heat is generated, combined cycle technology is more than twice as efficient with respect to water usage than facilities using simple cycle technology. Exhibit 22, p. 19.

Second, the Applicant plans to use salt water cooling tower to dissipate excess heat rather than rely on the more traditional "once through" cooling systems used by most electric plants in coastal locations. This method will represent a reduction in cooling water needs of nearly 95% when compared with a "once through" cooling water system for a facility in the 525 megawatt size range. Exhibit 22, p. 20.

To reduce the potential for aquatic resource impacts, the Applicant will install two intake pumps which will be located behind a traveling screen so that marine life is protected from the pump suction. The traveling screens will be of the modified Ristroph design which has been determined by the EPA to represent the best technology available for the protection of fish and marine life. Exhibit 22, p. 20.

Third, cooling tower blowdown will be discharged through a new multi-port diffuser designed to minimize any negative environmental effects. The discharge is also subject to the new source performance standards contained in 40 CFR 423. Exhibit 22, p. 21.

In addition, the Applicant represents that the discharge of process waste water to the Newington sanitary sewer system will be in compliance with the pretreatment standards for new sources and the Town of Newington industrial discharge requirements. Exhibit 22, p. 22.

The NHDES Water Division has reviewed the application, including various concerns raised by the intervenors and found that the application limited by conditions attached hereto will not have any unreasonable adverse impacts on water quality.

The Committee finds there are no unreasonable adverse impacts on air and water quality caused by the construction, operation or maintenance of the proposed, facility limited by the appropriate conditions that will be attached to the Certificate of Site and Facility, as Attachment G and H.

#### **d. Impact On The Natural Environment:**

The Applicant asserts that it has taken extensive measures as outlined in the application to reduce impacts on sensitive environmental areas. Wetland resources on the site were identified and mapped. The Applicant's construction plans are to fully restore and replace any wetland resources affected by the project. Construction in wetlands will comply with the State's rules and regulations. The Applicant will preserve the majority of wooded sections on the site by leaving them in their natural state. Exhibit No. 22, p. 22 & 23.

Correspondence with the New Hampshire Heritage Program and ecological surveys of the site indicated that no threatened or endangered plant or animal species were found on the site. Exhibit No. 22, p. 24; Application, Vol. II, Historic Resources Review.

The Applicant has met with the DES, the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, the New Hampshire Fish & Game Department and the New Hampshire Coastal Program to discuss the NPDES permit application and to confirm that the various methods and models used were appropriate. The National Marine Fisheries Service has also been fully informed on the project and been provided with updates on the project status. No information indicating the presence of unique ecosystems has been received as a result of these contacts. Concerns raised relative to fishery and other estuarine communities will be addressed through the NPDES permit process to ensure no significant impacts. A decision by the U.S. Environmental Protection Agency on the NPDES permit application is expected in the immediate future. Vol. III, National Heritage Inventory Program.

The use of a traveling screen on the intake port will minimize the number of marine species which will be attracted to the intake. Exhibit 22 p. 24. The NHDES has issued conditions to ensure that cooling water dispersed into the river will be constrained to a small area of the river and will not impact on the fishery stock or on the river. See, Attachment G and H.

As in any project of this size, considerable analysis, examination and study of the effects on the natural resources of the state has been performed. The various agencies have examined and studied the Applicant's Environmental Construction Plan and have advised, informed and directed the Applicant to take certain measures to eliminate or mitigate, environmental impacts. The areas reviewed included, state fisheries; impacts on the river; threatened, endangered, and rare plant and animal species; sensitive and wetland habitats. The New Hampshire Natural Heritage Program, the NHDES and other state agencies have all participated in developing suitable mitigation measures for these areas at risk.

The Committee finds that the proposed facility will not cause any unreasonable adverse impacts on the natural environment so long as the Applicant complies with the conditions set forth in Attachment H to the Certificate.

#### **e. Impact on Public Health and Safety**

The Applicant asserts its commitment to safety, both in the work place and in the surrounding community. Exhibit 22, p.18. It claims to have used state of the art technology to design a safe facility and assert that it is of fundamental importance that the facility be constructed and operated in a safe manner. The Applicant maintains that the facility is designed with the most up to date safety features available. It will comport to all applicable state and federal regulations and statutes regulating the safe design, construction and operation of electrical generation facilities. The gas interconnection will also be designed in consultation with the pipeline operator to minimize any associated dangers. The Applicant has also developed specific procedures for certain activities including the handling of toxic chemicals, exposures to dangerous noise levels and live electrical work. In addition the Applicants will develop training programs to provide emergency health care, emergency training programs and safety programs. The Applicant also maintains that the proposed facility is designed to maintain an operational noise level of no more than 5 dBAs above the current background noise level. The Applicant maintains the construction and operation of the facility will not have an unreasonable adverse effect of public health and safety.

##### **i) Fire Safety and Emergency Response**

The Newington Fire Chief Larry Wahl, testified about the Applicant's emergency response plans and handling of hazardous materials. PT Larry Wahl, Exhibit 48, p 8. Public Counsel presented Henry Renfrew, an independent safety expert, who testified, "based on the information received and evaluated during the fire and safety assessment, the proposed facility will not have an unreasonable or adverse impact on public safety provided that the recommendations identified in (his) report are part of the conditions for approval of the facility by the EFSEC and the Applicant complies with these recommendations." PT Henry Renfrew, Exhibit 56. He further testified that:



... the EFSEC should ensure that the State Fire Code is enforced and the National Fire Protection Association (NFPA) standard #850. NFPA 850 contains specific recommendations for fire protection at electrical generating plants including a requirement for a Fire Risk Evaluation. Various OSHA and EPA regulations mandate requirements which will significantly promote public safety and the safety of local emergency responders. These regulations require a review of the hazards at the facility, a pre start-up safety review, training for employees and development of emergency plans and coordinating emergency responses with local responders. The EFSEC should ensure compliance with these federally mandated requirements. Enforcement of the State Fire Code is at a local level with technical assistance available from the State Fire Marshal. Local emergency responders need to have direct input in the evaluation of the hazards on site and emergency response procedures and plans for the proposed facility. Given the size and complexity of electric generating plants the EFSEC should ensure that the Applicant provide technical assistance.

PT Henry Renfrew, Exhibit 56.

Both Mr. Renfrew and Fire Chief Wahl recommend many conditions based on public safety considerations. The Applicant agreed to the recommended conditions. Those conditions include compliance with the NFPA Standard No. 850 which contains recommendations for fire protection at electric generating plants and high voltage direct current converter stations. NFPA Standard No. 850 has not been adopted by the State Fire Marshall but contains a stricter standard than the code presently adopted in New Hampshire. The safety conditions which were recommended by Mr. Renfrew and Chief Wahl also include compliance with a host of state and federal agency codes and standards, which are set forth in Attachment B. The conditions also include a requirement of consultation and approval by local authorities and designates the State Fire Marshall as the final arbiter of any disputes concerning fire safety. The conditions also address construction of the facility in such a manner as to identify, avoid and/or contain chemical spills or gas leaks. Pursuant to the conditions the Applicant has also agreed to provide technical and financial support to the Town in the areas of training, emergency planning, and the purchase of specialized safety equipment.

The Committee recognizes that the proposed facility which uses natural gas to produce electricity presents unique public safety issues. The Committee takes these issues extremely seriously. The Committee finds that the proposed conditions are necessary to ensure that there is no adverse or unreasonable impact on public safety. Even in the absence of the parties' agreement the Committee would have required similar conditions for the benefit of the safety of the public. Pursuant to its obligation to monitor a facility which is the subject of a Certificate of Site and Facility, RSA 162-H: 4 I (c), the Committee will not hesitate to revoke the Certificate if it finds that the safety conditions are ignored. The safety conditions that were agreed upon by the parties and are attached to the Certificate as Attachment B are adopted as part of the Certificate of Site and Facility.



## ii) Noise

The proposed site is located in a heavily industrialized area in proximity to the Spaulding Turnpike and other well traveled thoroughfares, the commercial district of Newington which contains a number of shopping plazas and at least two large shopping malls, and a heavily industrialized section of the Piscataqua River. There are two small residential neighborhoods in the area on Avery Road and Patterson Lane. Background noise in this area is louder than one would normally expect in a residential neighborhood. Newington and Public Counsel both addressed the noise impact of the construction and operation of the proposed facility on the surrounding area.

Public Counsel presented an acoustical engineer, James Barnes of Accentech, a multi-disciplinary acoustical engineering firm, who stated that "Based on our review and on our experience with the construction of other power facilities, we judge that the construction of this facility will not likely result in an unreasonable adverse noise impacts on the community." PT James Barnes, Exhibit 55. Mr. Barnes initially made the following recommendation to assure that construction noise be limited:

1. The Applicant maintain a telephone hot line service and respond to individual noise complaints from community residents.
2. Limit construction work to weekday hours of 7:00 AM to 7:00 PM, with additional hours by special permit only.
3. Utilize mufflers on all engine driven equipment.
4. Utilize mufflers for the steamblow activity.
5. Notification to the Community in advance of driving and blasting activities.

PT James Barnes, Exhibit 55. Subsequent to the filing of Exhibit 55 and prior to the adversarial hearing the Town of Newington, Public Counsel, and the Applicant pursued a stipulation concerning construction noise. Eventually the parties reached agreement on the majority of issues concerning construction noise levels. The Committee adopts the conditions contained in Attachment C (I).

Mr. Barnes also testified about operational noise levels of the facility. Mr. Barnes commented, "Based on our review, we judge that significant effort will be necessary to design, construct, and operate a facility that will not result in an unreasonable adverse noise impact on the community. Our experience indicates that the facility design should include appropriate margins and allowance for potential additional treatments in order to ensure that the overall project goals can be attained." Mr. Barnes recommended that the Site Evaluation Committee require certain conditions for the design and operation of the facility in order to avoid any unreasonable adverse noise impact. Exhibit 55.

During the adversarial hearings all of the recommendations presented by Mr. Barnes were examined and reviewed by the parties. As a result of that process the parties presented a list of proposed conditions pertaining to noise impacts stemming from the design and operation of the proposed

facility. On March 18, 1999 Public Counsel informed the Committee that the recommended noise design condition agreed to by the Applicant and the Town did not assure that the facility would operate without adverse impact on the community. Public Counsel presented a proposed condition to provide such assurance. See, Letter from Public Counsel, March 18, 1999. The Applicant responded and claimed that Public Counsel's proposed condition is unworkable and unnecessary. See, Letter from Counsel for Applicant and Counsel for Town March 23, 1999. Each party claims support for its position in the testimony of Mr. Barnes.

During the adversarial hearings all of the recommendations presented by Mr. Barnes were examined and reviewed by the parties. As a result of that process the parties presented a list of proposed conditions pertaining to noise impacts stemming from the design and operation of the proposed facility, RR 3/15/99. The committee has examined all of the proposed conditions and accepts and adopts those conditions as Attachment C to the Certificate of Site and Facility.

The Committee finds that the proposed facility with the conditions imposed by the Committee, as Attachments B and C, will not have any unreasonable adverse effect of the public health and safety.

### **iii) Public Health Benefits**

The Committee finds that the technology proposed by the applicant is capable of reducing the amounts of pollutants released to the air resulting from the generation of electricity. Specifically, the ARD projects that if built and dispatched, this facility could potentially reduce the amount of Nox, SO<sub>2</sub> and CO<sub>2</sub> emitted in New Hampshire by 9,912 tons, 18,961 tons, and 2,918.066 tons per year respectively. While it is not possible to predict the exact decrease in respiratory illness rates expected to result from this decrease in pollutant loading, it is a basic tenet of public health that primary prevention (that is, avoiding the conditions that lead to illness before the illness occurs) reduces societal costs both in terms of human suffering and health care costs. Thus, the Committee finds that this facility will not have any unreasonable adverse effect on public health and in fact, could yield a net public health benefit by reducing the burden of lung disease mortality.

## **4. Consistency with State Energy Policy**

RSA 162-H:16 V (d) requires that the construction, operation and siting of a proposed generation facility be consistent with state energy policy as set forth in RSA 378:37:

The general court declares that it shall be the energy policy of this state to meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost while providing for the reliability and diversity of energy sources; the protection of the safety and health of the citizens, the physical environment of the state, and the future supplies of nonrenewable resources; and consideration of the financial stability of the state's utilities.

The Applicant asserts that the proposed facility will meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost while providing a diverse energy resource to

the state and region. Specifically, the Applicant states that through use of state-of-the-art technology and equipment, and the use of low-cost natural gas, the facility will produce reliable lower cost power in New England, which will benefit New Hampshire consumers.

In assessing whether the proposed project is consistent with the state's energy policy, the Committee notes that this energy policy statement comports with the balancing of interests set forth in the Site Evaluation Committee's enabling legislation. In crafting RSA 162-H, the legislature was both mindful of the need to address "the present and predicted growth in electric power demands in the State of New Hampshire," and also careful to assert that "the public interest requires that it is essential to maintain a balance between the environment and the need for new power sources...." RSA 162-H:1II. Under our mandate to consider compliance with state energy policy, the Committee must focus on whether the proposed facility will meet the need for new power in a fashion that fosters reliability, source diversity, environmental improvement, and lower costs for New Hampshire customers.

The Applicant has presented evidence that this facility introduces generating technology to New Hampshire that is significantly more energy-efficient and environmentally friendly than existing fossil fuel plants in the region. The applicant has also presented evidence that development of this gas-fired combined cycle facility will enhance the diversity of energy sources in New Hampshire. The Committee also determines that the facility will foster system reliability, including during peak periods that create capacity shortages, such as those New Hampshire and the region have experienced in recent summers. Indeed, this facility may well reduce the likelihood that dirtier "mothballed" generating units will need to be reactivated to avert capacity shortages, thus further contributing to reduced emissions and improved air quality as well as lower power costs. Further findings regarding this project's compliance with environmental protection, as well as public safety and health goals, are addressed more fully elsewhere in this decision.

With the advent of competitive wholesale and retail power markets in New England, the Committee's inquiry as to need for new power facilities has of course broadened beyond the immediate and long term capacity needs to serve projected increases in native consumption and demand, to include the degree to which new, more efficient facilities will benefit New Hampshire customers by helping to foster regional market development. The Committee finds that the proposed plant will increase the number of wholesale producers in New England, and that such new, efficient generating capacity will serve the interests of New Hampshire customers by fostering competition as a means to bring lower cost power to New Hampshire and the region.

In light of the above, the Committee finds that the proposed facility is consistent with the state energy policy.

## **VI. CONCLUSION**

The Site Evaluation Committee, pursuant to RSA 162-H:2 VII and RSA 162-H:1 finds that the proposed Newington Power Production Facility requires a Certificate of Site and Facility to construct and operate the natural gas electric production facility and its associated facilities in the Town of Newington, New Hampshire.

After having considered available alternatives and having fully reviewed the environmental impacts of the proposed facility and other factors bearing on whether the objectives of Chapter 162-H would be best served by the issuance of a certificate the Committee will issue a Certificate of Site and Facility to the Applicant for the proposed facility.

The Committee finds the Applicant Newington Energy, L.L.C. has adequate financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate.

After due consideration having been given to the views of municipal and regional planning commissions and municipal legislative bodies, the Committee finds the proposed project will not unduly interfere with the orderly development of the region.

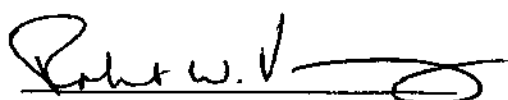
Upon compliance with the conditions attached to the Certificate the project will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment or public health and safety.

The proposed Facility is consistent with the state energy policy established in RSA 378:37.

The Site Evaluation Committee finds that the construction and operation of the proposed facility complies with the criteria of RSA 162-H. The Committee will approve the application for a Certificate of Site and Facility for Newington Energy L.L.C. to construct and operate a 525 megawatt electric production facility in the Town of Newington, New Hampshire. The facility will consist of two General Electric 7FA combustion turbines, two heat recovery steam generators and one steam turbine generator. A salt water mechanical draft, plume abated, cooling tower will be used to cool the plant's circulating water. A Certificate and of Site and Facility with appropriate conditions attached will be issued by Order of the Site Evaluation Committee.

The Application and Petitions are referred to the Air Division, Water Division, and Waste Management Division, of the Department of Environmental Services, The Office of State Planning and the Public Utilities Commission for the issuance of such permits and licenses as required by law to be included in the Certificate of Site and Facility.

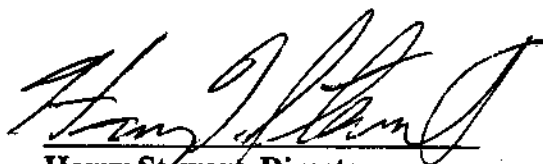
Dated this 25<sup>th</sup> Day of May, 1999, at Concord, New Hampshire.



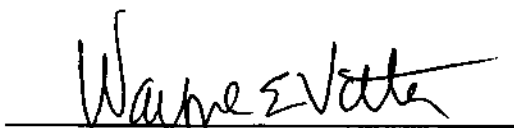
**Robert W. Varney, Chairman**  
**Commissioner, Dept. of**  
**Environmental Services**



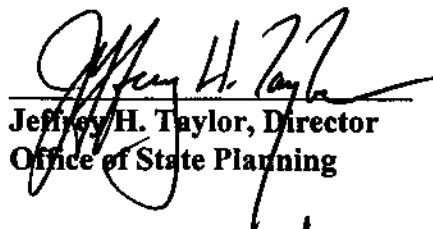
**Douglas L. Patch, Chairman**  
**Public Utilities Commission**



Harry Stewart, Director  
Water Division, Dept of  
Environmental Services



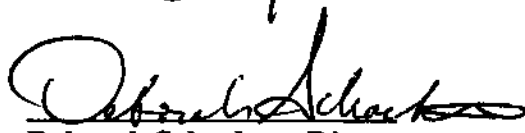
Wayne Vetter, Director  
Fish and Game Dept.



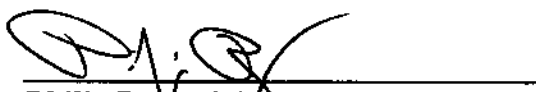
Jeffrey H. Taylor, Director  
Office of State Planning



Kenneth A. Colburn, Director  
Air Resources Division, Dept.  
of Environmental Services



Deborah Schachter, Director  
Governor's Office of Energy &  
Community Services

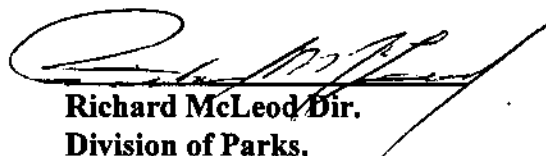


Philip Bryce, Director  
Division of Forest & Lands, Dept. of  
Resources & Economic Development

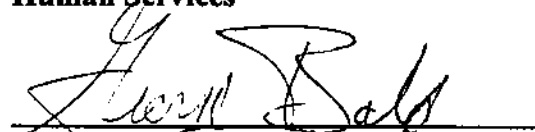
Leon S. Kenison, Commissioner  
Dept. of Transportation



Brook Dupee, Office of Community &  
Public Health, Dept of Public Health &  
Human Services



Richard McLeod Dir.  
Division of Parks,  
Dept. of Resources & Economic  
Development



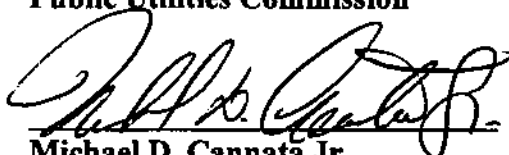
George Bald, Commissioner  
Dept. of Resources & Economic  
Development



Susan S. Geiger, Commissioner  
Public Utilities Commission



Nancy Brockway, Commissioner (c.d.)  
Public Utilities Commission



Michael D. Cannata Jr.,  
Chief Engineer  
Public Utilities Commission